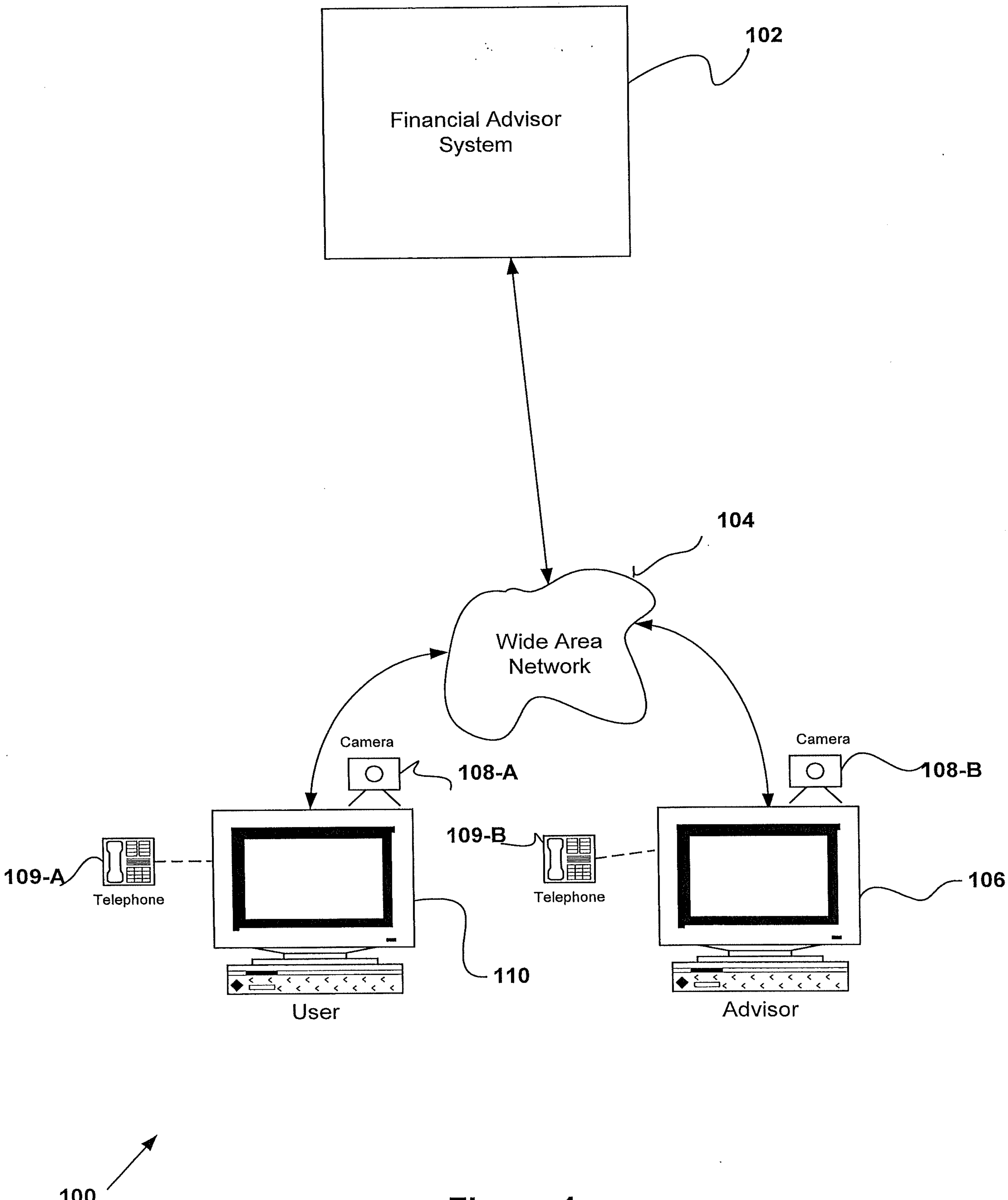

Financial Advisor
System
102
104
Wide Area
Network
Camera
108-A
Camera
108-B
109-A
Telephone
109-B
Telephone
106
110
User
Advisor
100

Figure 1

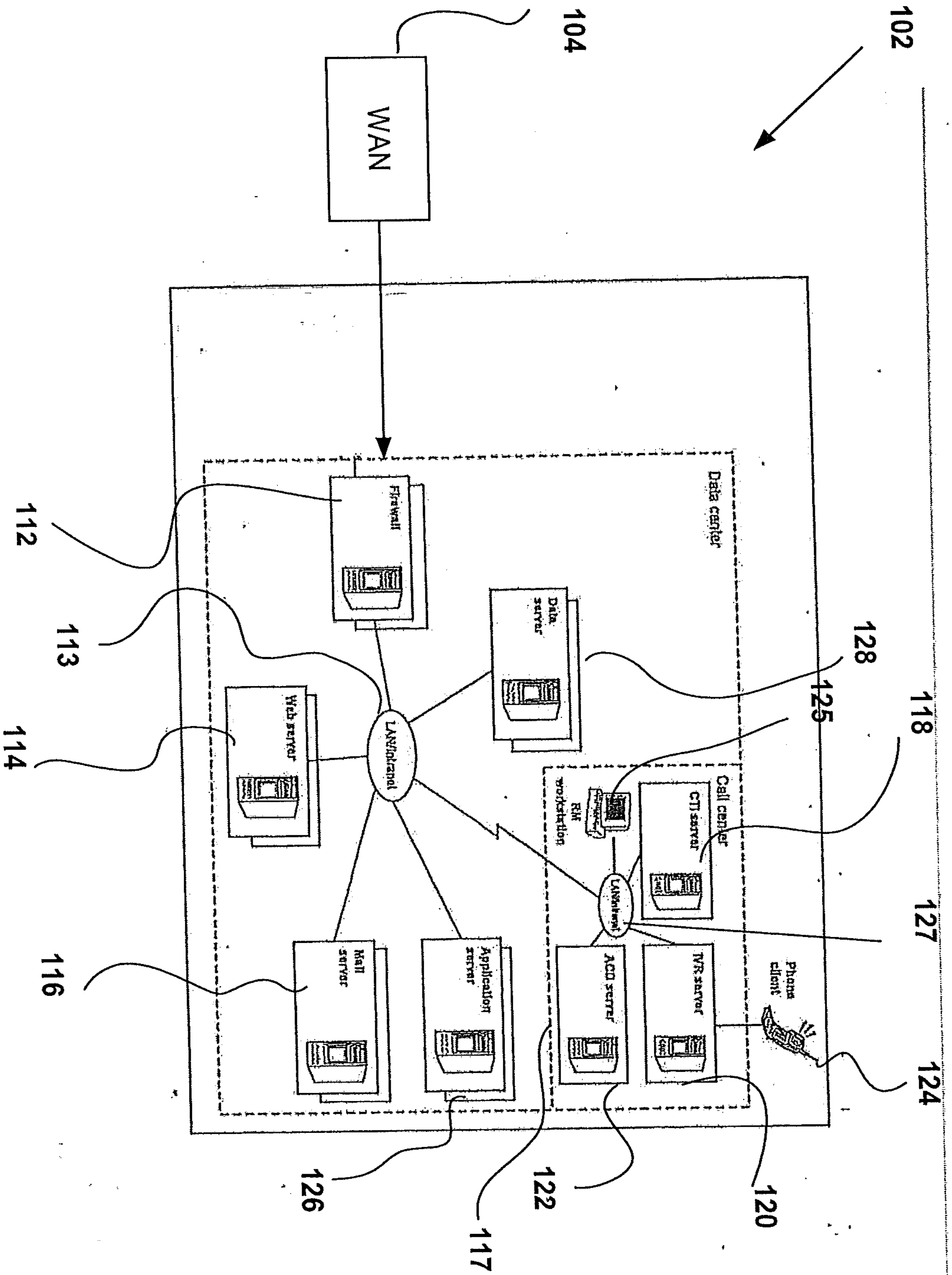

104
102
WAN
Data center
Firewall
Data server
Web server
LAN/Intranet
Mail server
Application server
Call center
CTI server
RM workstation
ACD server
IVR server
Phone client
112
113
114
116
126
117
122
120
124
127
118
125
128

Figure 2

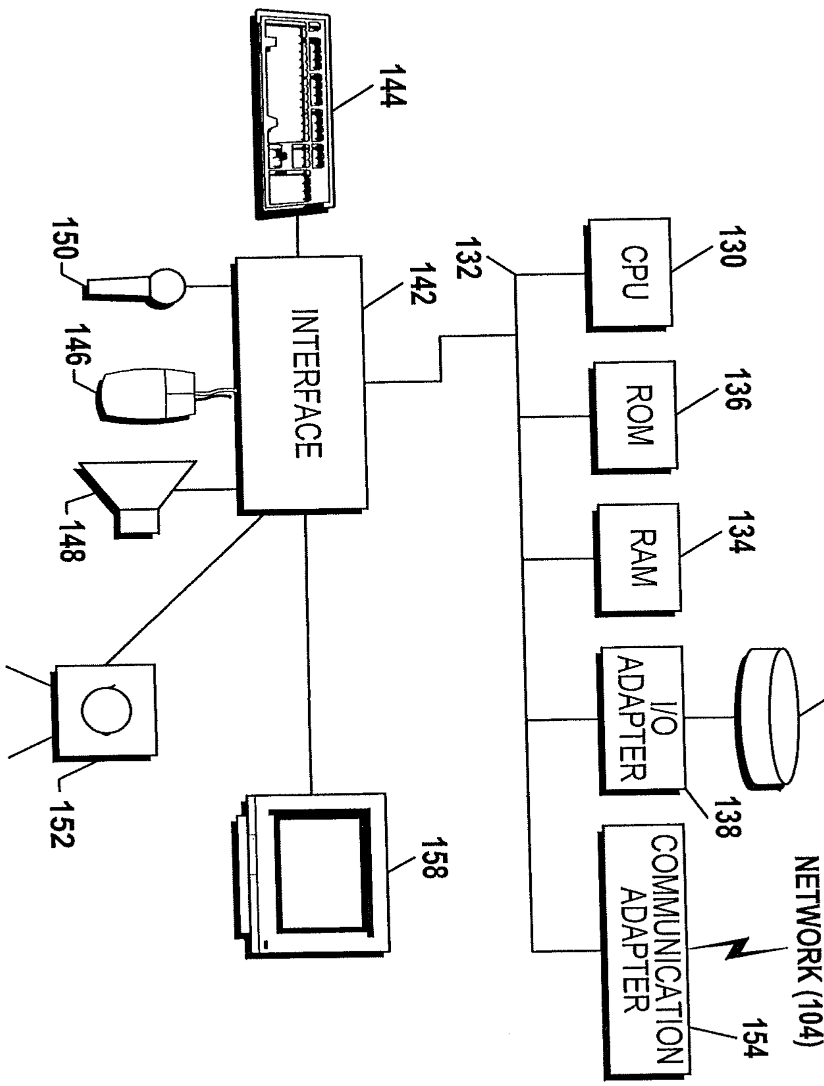

144
150
146
148
142
INTERFACE
152
158
132
CPU
130
ROM
136
RAM
134
I/O
ADAPTER
138
140
COMMUNICATION
ADAPTER
154
NETWORK (104)

Figure 3

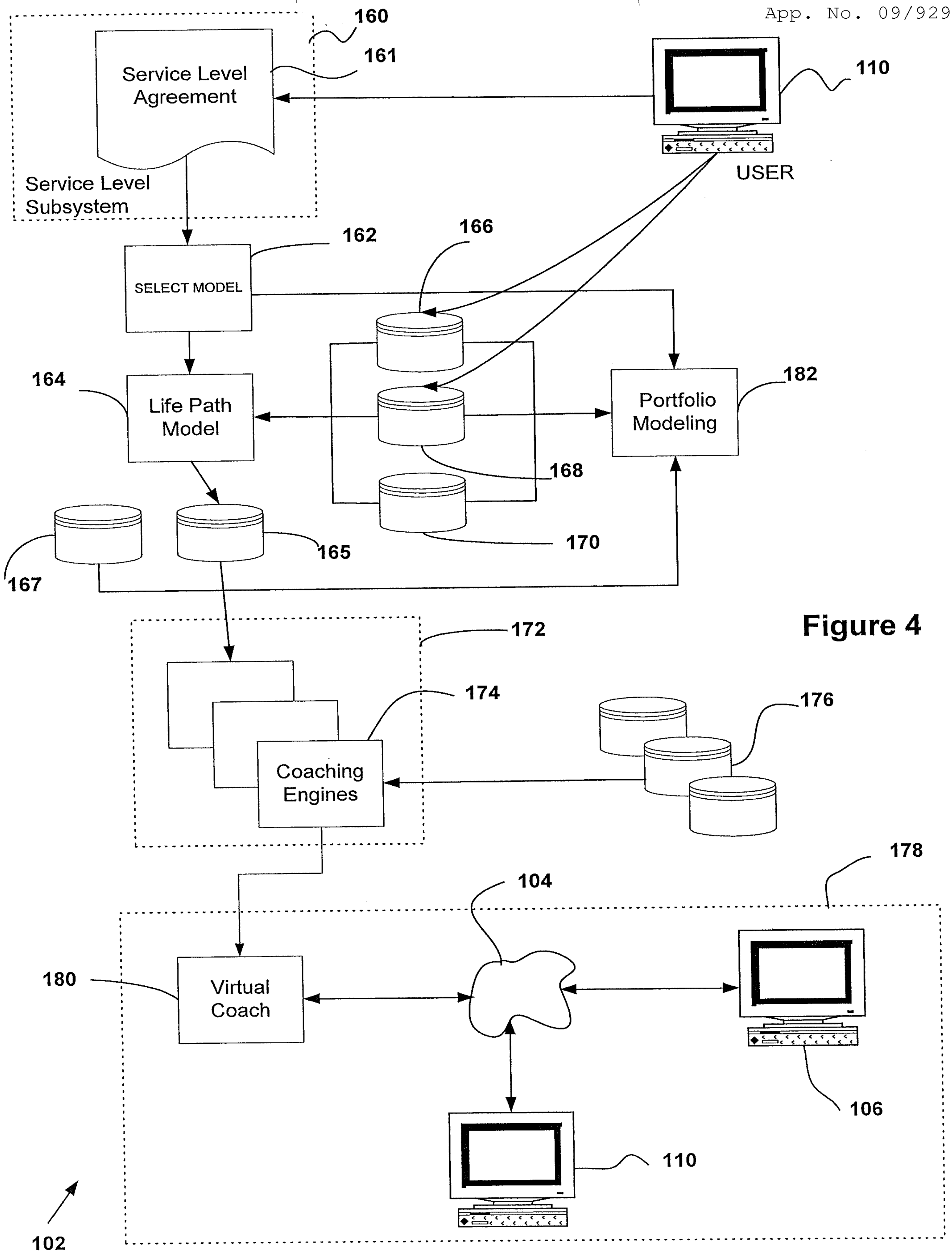

160
161
Service Level Agreement
Service Level Subsystem
110
USER
162
SELECT MODEL
166
164
Life Path Model
182
Portfolio Modeling
168
170
167
165
172
174
176
Coaching Engines
178
104
180
Virtual Coach
106
110
102

Figure 4

Figure 5

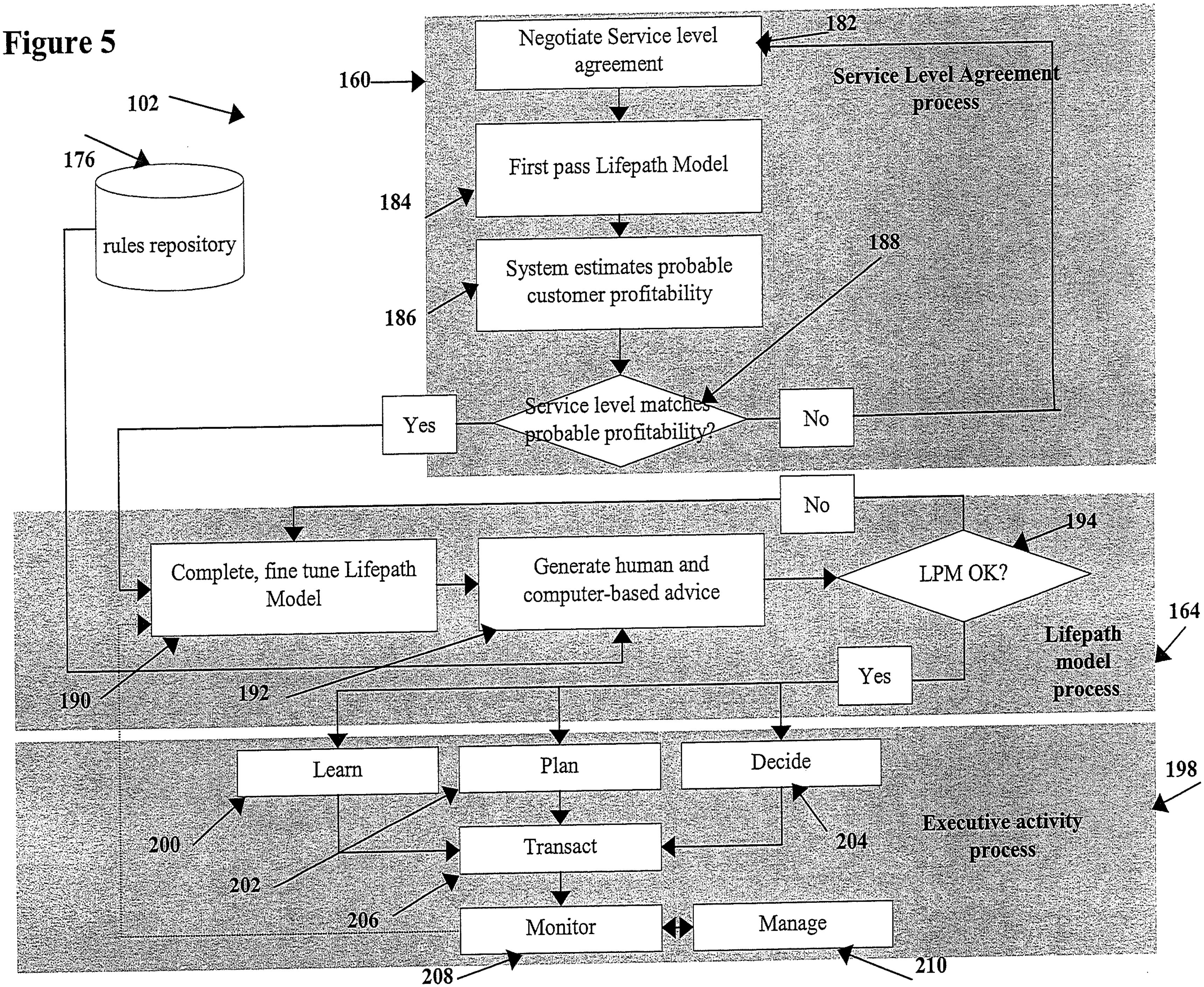
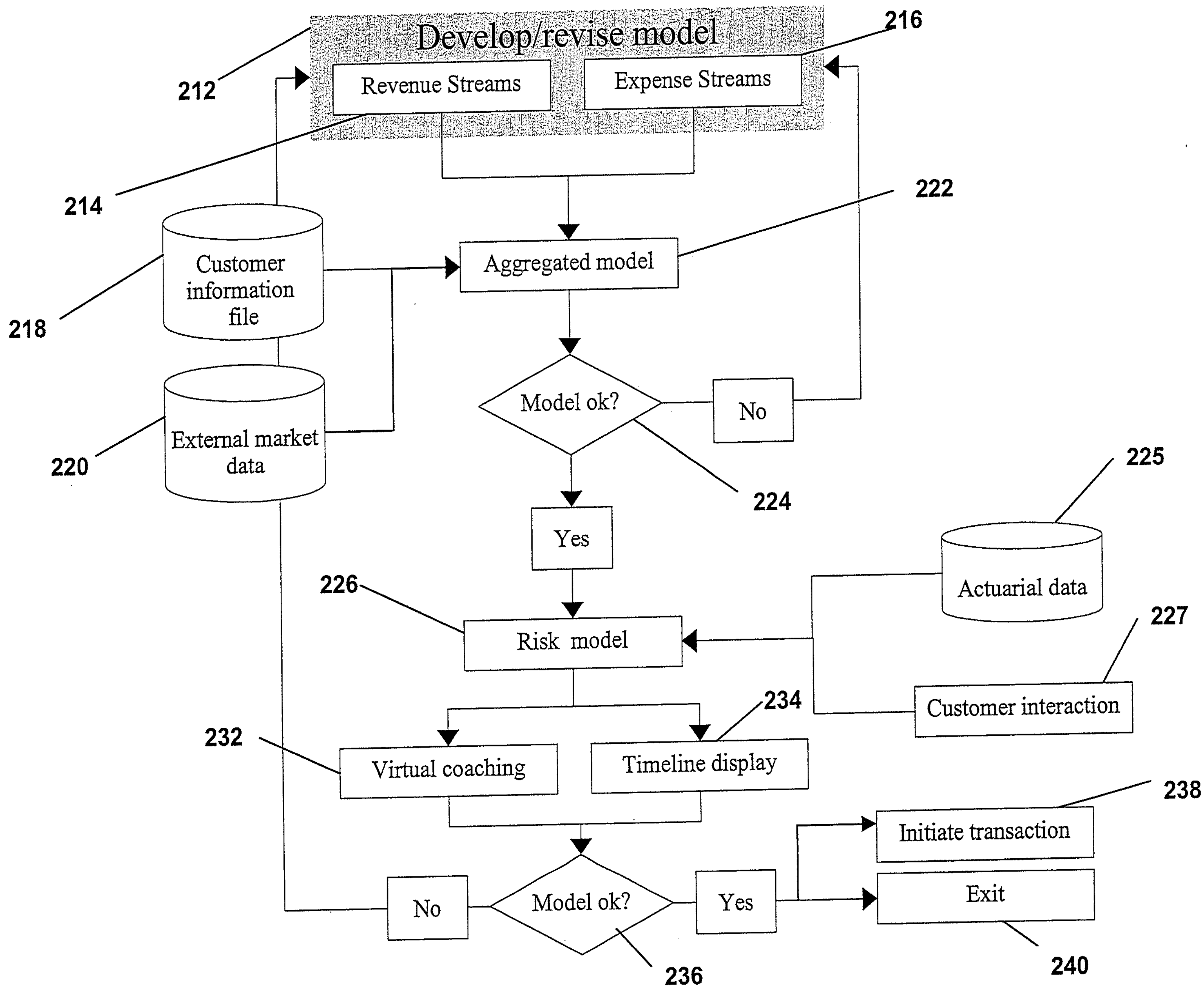

102
176
rules repository
160
Negotiate Service level agreement
182
Service Level Agreement process
First pass Lifepath Model
184
System estimates probable customer profitability
186
188
Service level matches probable profitability?
Yes
No
No
194
Complete, fine tune Lifepath Model
Generate human and computer-based advice
LPM OK?
164
Lifepath model process
Yes
190
192
Learn
Plan
Decide
198
200
Transact
204
Executive activity process
202
206
Monitor
Manage
208
210

Figure 6


Develop/revise model
Revenue Streams
Expense Streams
212
214
216
Customer information file
218
External market data
220
Aggregated model
222
Model ok?
224
No
Yes
225
Actuarial data
226
Risk model
227
Customer interaction
232
Virtual coaching
234
Timeline display
No
Model ok?
Yes
236
238
Initiate transaction
Exit
240

Replacement Sheet
App. No. 09/929,610

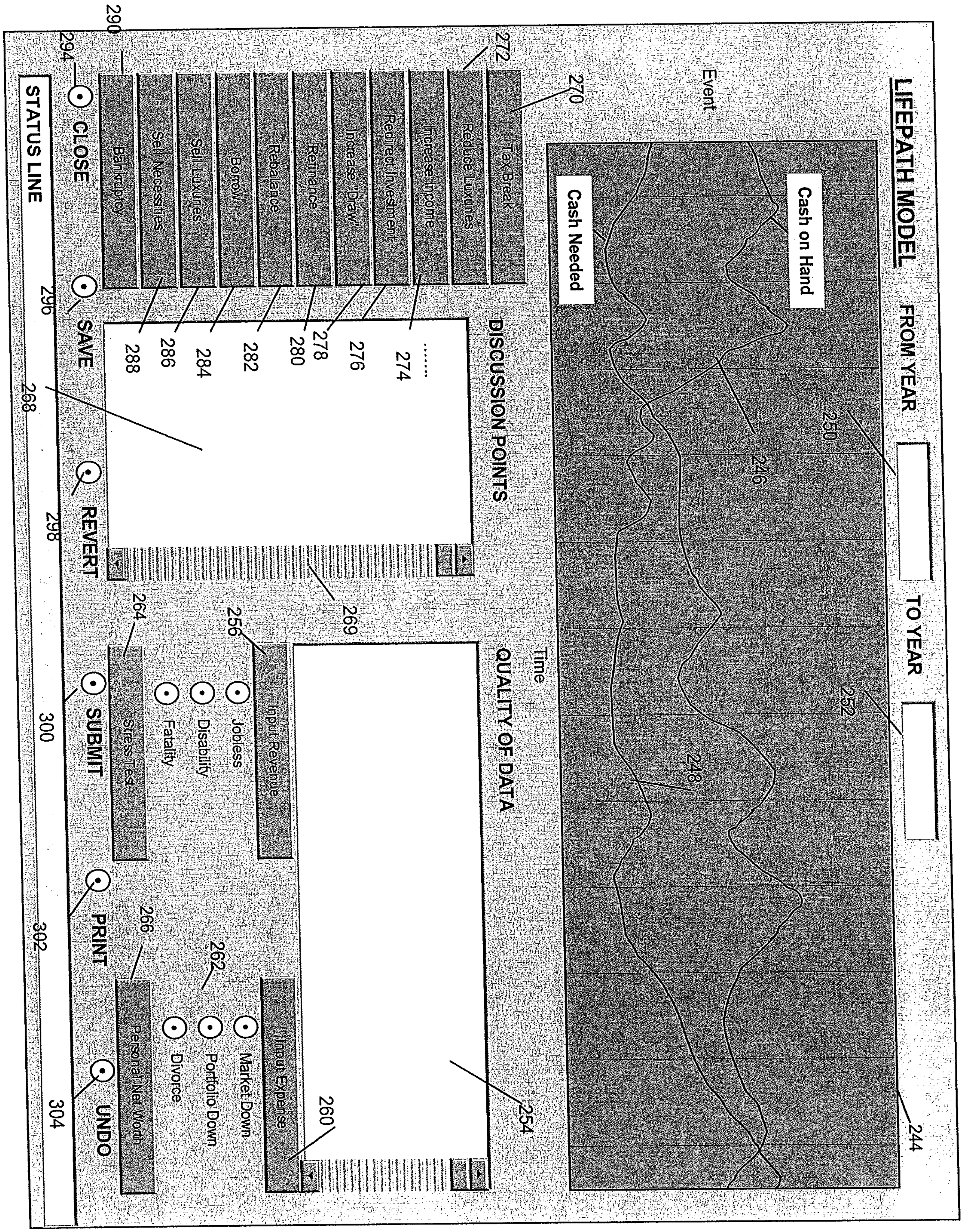


FIGURE 7

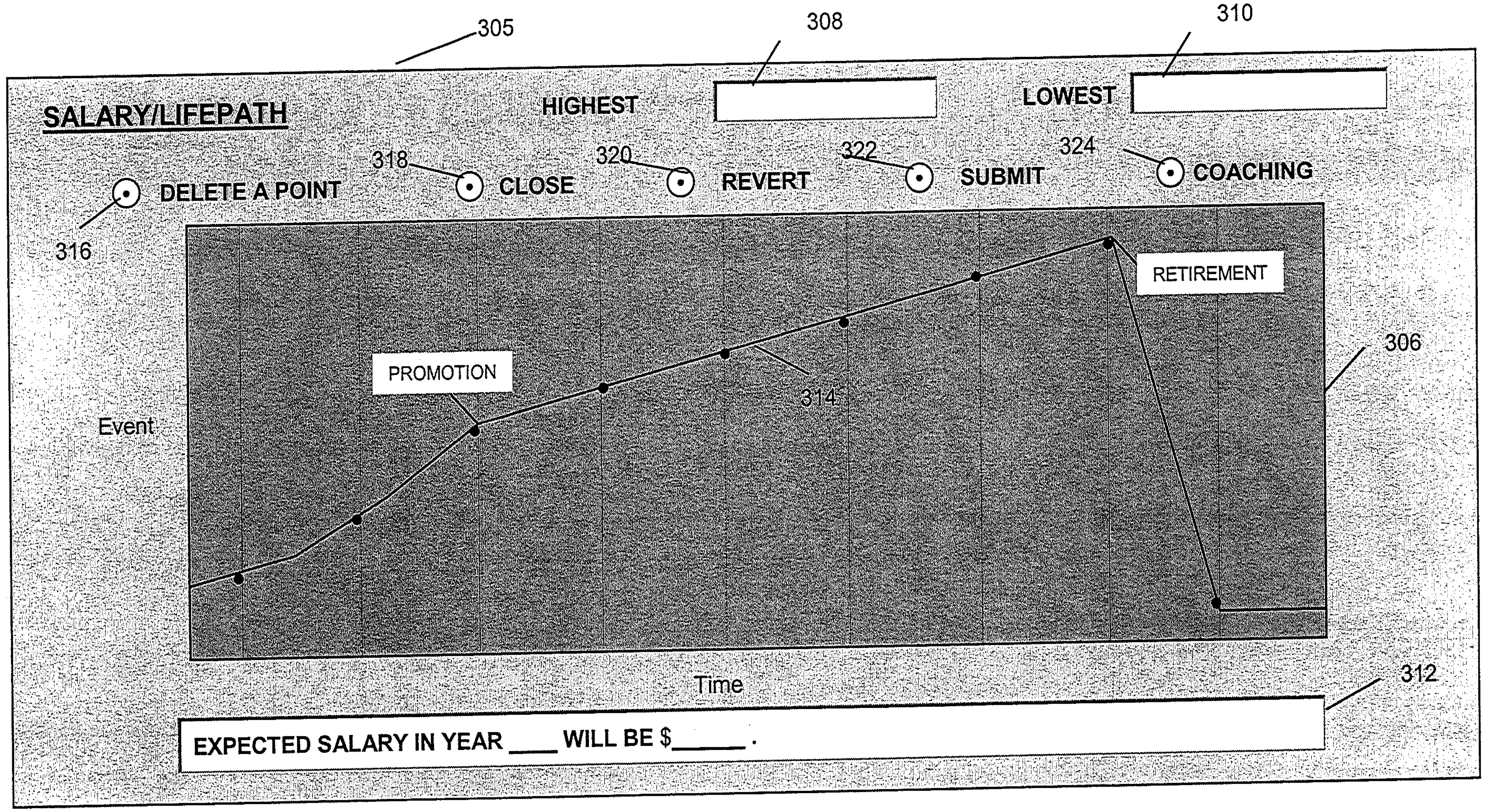


FIGURE 8

*All values in current dollars as if inflation will be 0%. Inflation will be represented by discounting it from all compound growth estimates

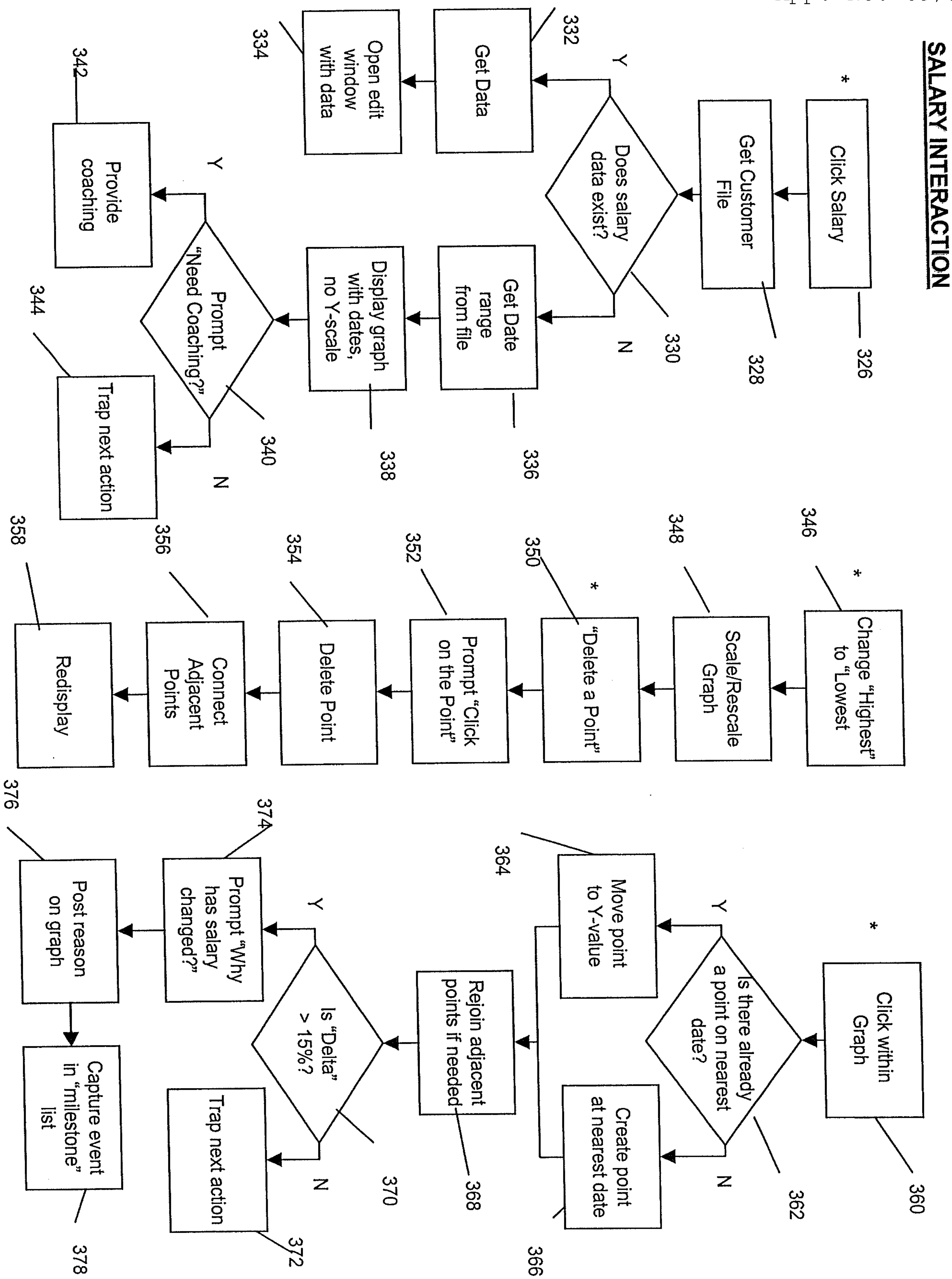

SALARY INTERACTION
*
Click Salary
326
Get Customer File
328
Does salary data exist?
330
Y
N
Get Data
332
Open edit window with data
334
Get Date range from file
336
Display graph with dates, no Y-scale
338
Prompt "Need Coaching?"
340
Y
N
Provide coaching
342
Trap next action
344
*
Change "Highest" to "Lowest"
346
Scale/Rescale Graph
348
*
"Delete a Point"
350
Prompt "Click on the Point"
352
Delete Point
354
Connect Adjacent Points
356
Redisplay
358
*
Click within Graph
360
Is there already a point on nearest date?
362
Y
N
Move point to Y-value
364
Create point at nearest date
366
Rejoin adjacent points if needed
368
Is "Delta" > 15%?
370
Y
N
Trap next action
372
Prompt "Why has salary changed?"
374
Post reason on graph
376
Capture event in "milestone" list
378

Figure 9

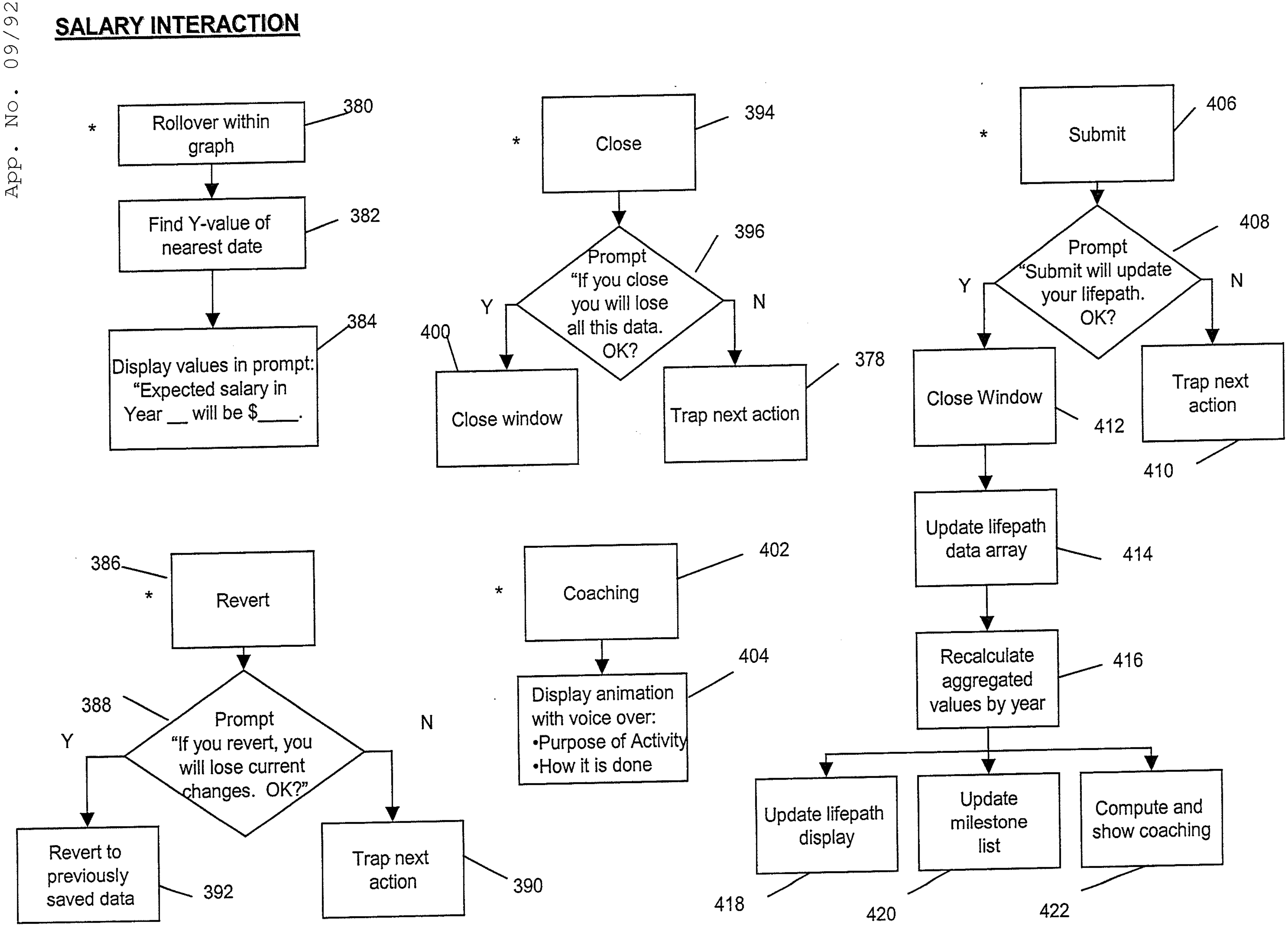

SALARY INTERACTION
*
Rollover within graph
380
Find Y-value of nearest date
382
Display values in prompt: "Expected salary in Year __ will be $____.
384
*
Close
394
Prompt "If you close you will lose all this data. OK?
396
Y
N
Close window
400
Trap next action
378
*
Submit
406
Prompt "Submit will update your lifepath. OK?
408
Y
N
Close Window
412
Trap next action
410
Update lifepath data array
414
Recalculate aggregated values by year
416
Update lifepath display
418
Update milestone list
420
Compute and show coaching
422
386
*
Revert
388
Prompt "If you revert, you will lose current changes. OK?"
Y
N
Revert to previously saved data
392
Trap next action
390
*
Coaching
402
Display animation with voice over:
•Purpose of Activity
•How it is done
404

FIGURE 10

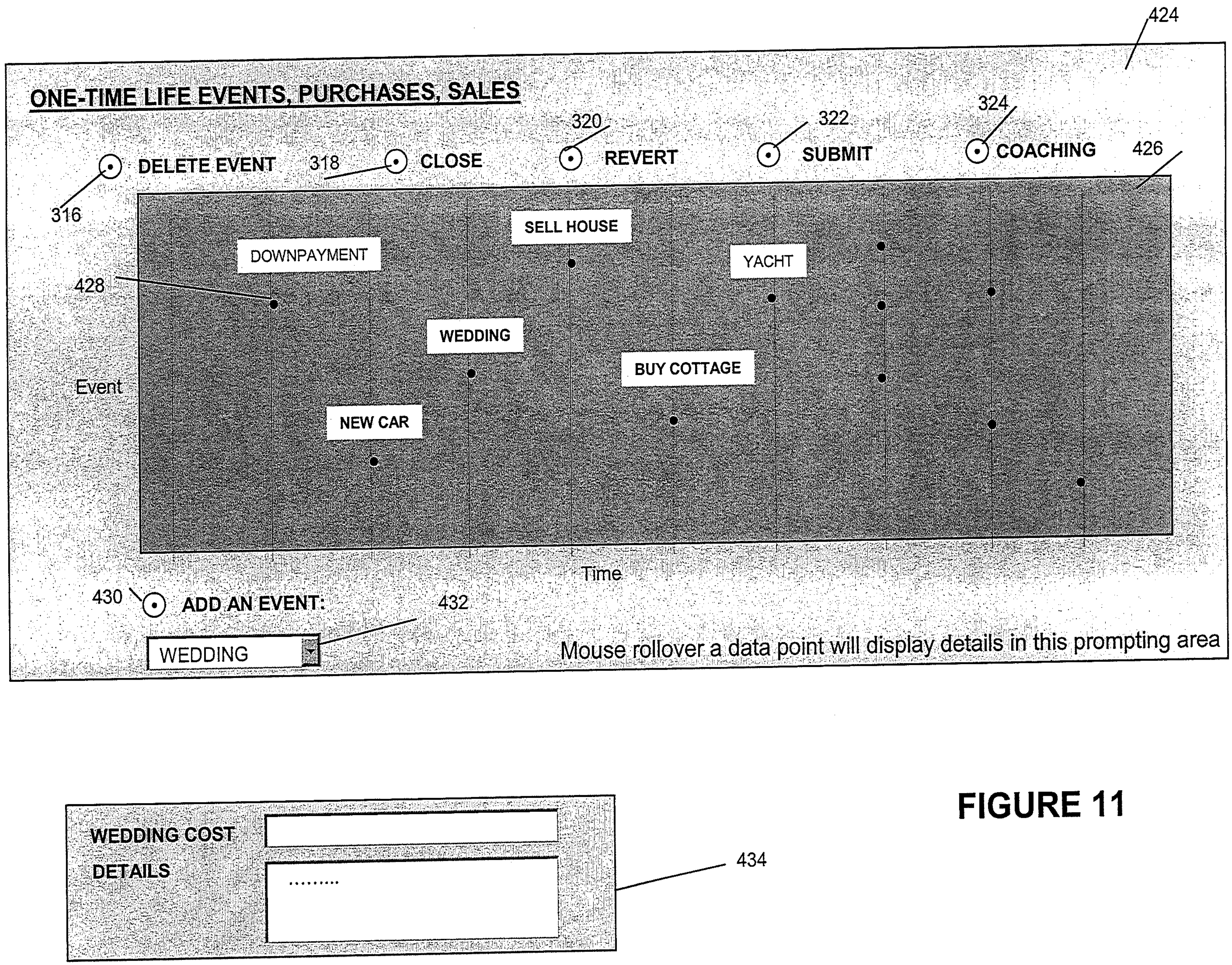

424
ONE-TIME LIFE EVENTS, PURCHASES, SALES
316
DELETE EVENT
318
CLOSE
320
REVERT
322
SUBMIT
324
COACHING
426
428
Event
DOWNPAYMENT
NEW CAR
WEDDING
SELL HOUSE
BUY COTTAGE
YACHT
Time
430
ADD AN EVENT:
432
WEDDING
Mouse rollover a data point will display details in this prompting area
WEDDING COST
DETAILS
....
434

FIGURE 11

INTERVENTION FLOW

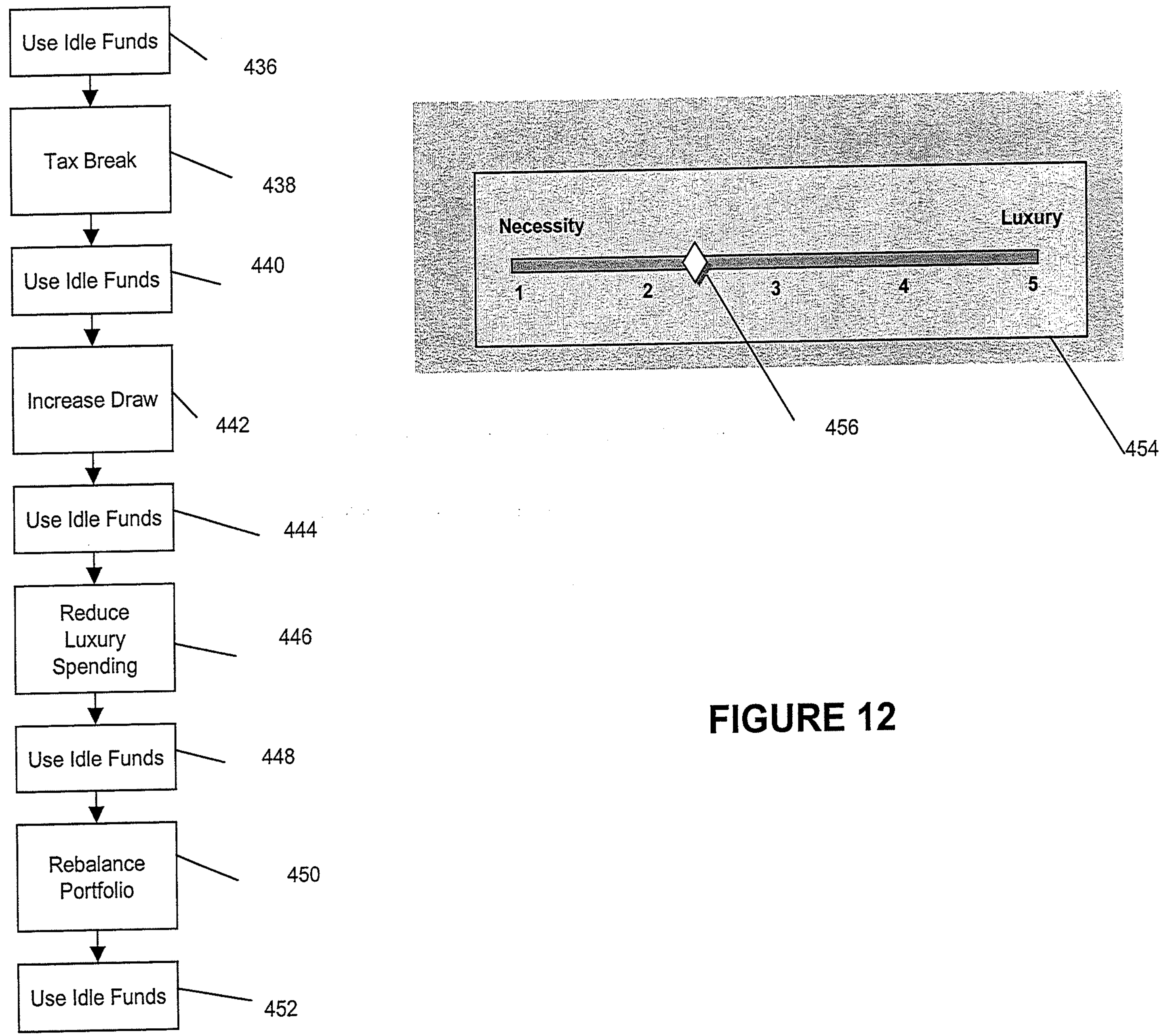


FIGURE 12

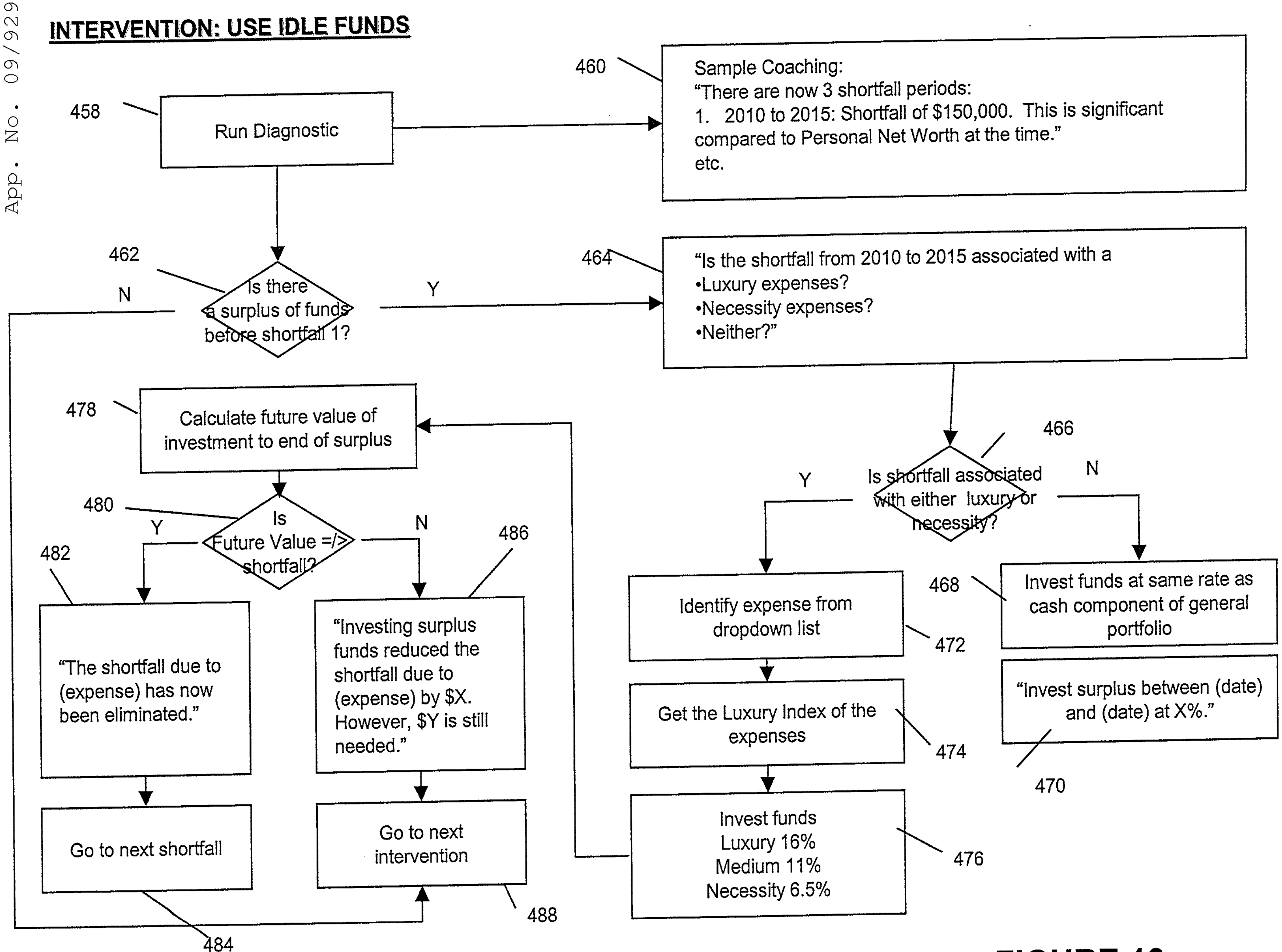

INTERVENTION: USE IDLE FUNDS
458
Run Diagnostic
460
Sample Coaching:
"There are now 3 shortfall periods:
1. 2010 to 2015: Shortfall of $150,000. This is significant compared to Personal Net Worth at the time."
etc.
462
Is there a surplus of funds before shortfall 1?
N
Y
464
"Is the shortfall from 2010 to 2015 associated with a
•Luxury expenses?
•Necessity expenses?
•Neither?"
466
Is shortfall associated with either luxury or necessity?
Y
N
468
Invest funds at same rate as cash component of general portfolio
"Invest surplus between (date) and (date) at X%."
470
Identify expense from dropdown list
472
Get the Luxury Index of the expenses
474
Invest funds
Luxury 16%
Medium 11%
Necessity 6.5%
476
478
Calculate future value of investment to end of surplus
480
Is Future Value =/> shortfall?
Y
N
482
"The shortfall due to (expense) has now been eliminated."
486
"Investing surplus funds reduced the shortfall due to (expense) by $X. However, $Y is still needed."
Go to next shortfall
484
Go to next intervention
488

FIGURE 13

INTERVENTION: TAX BREAK

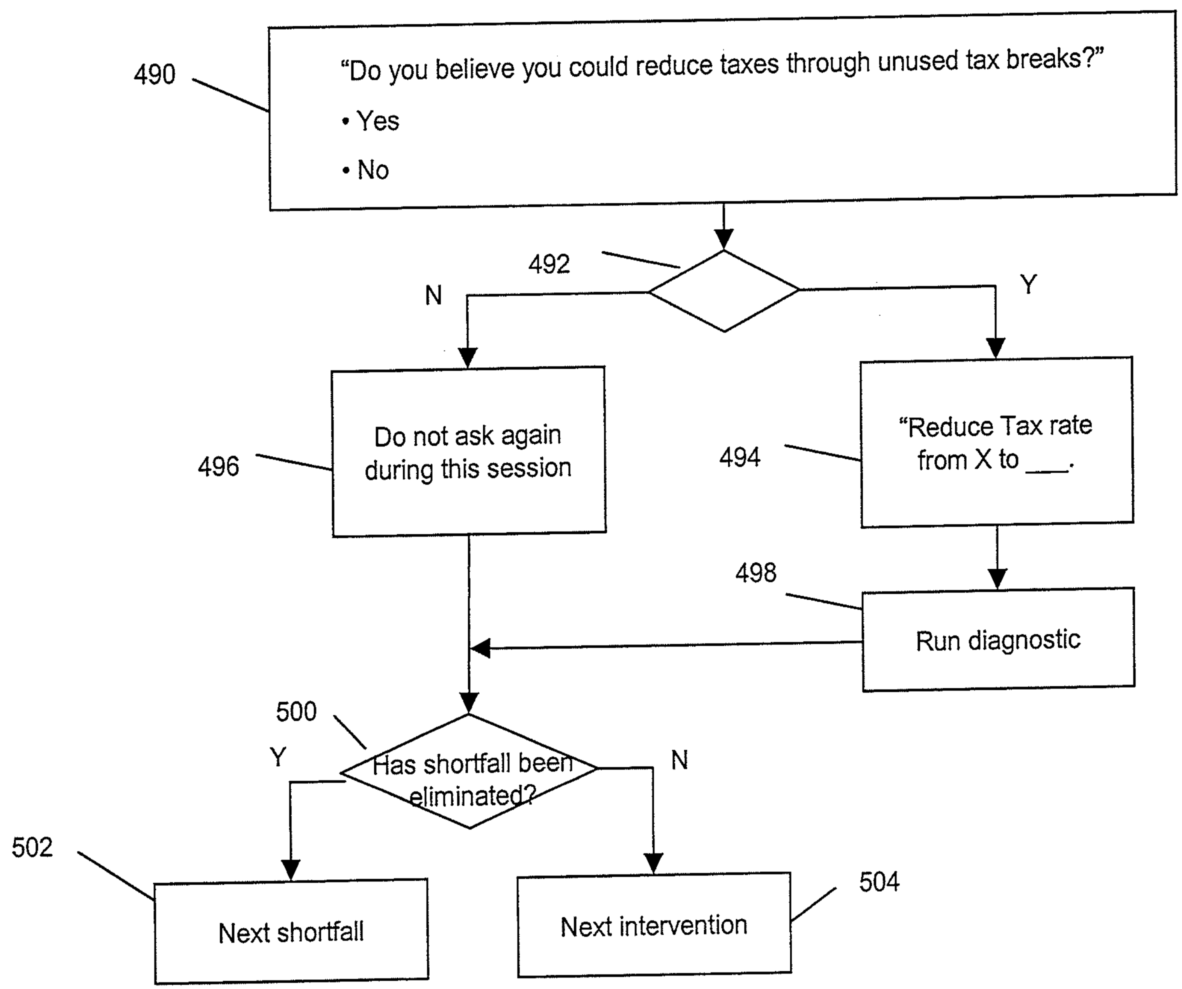


FIGURE 14

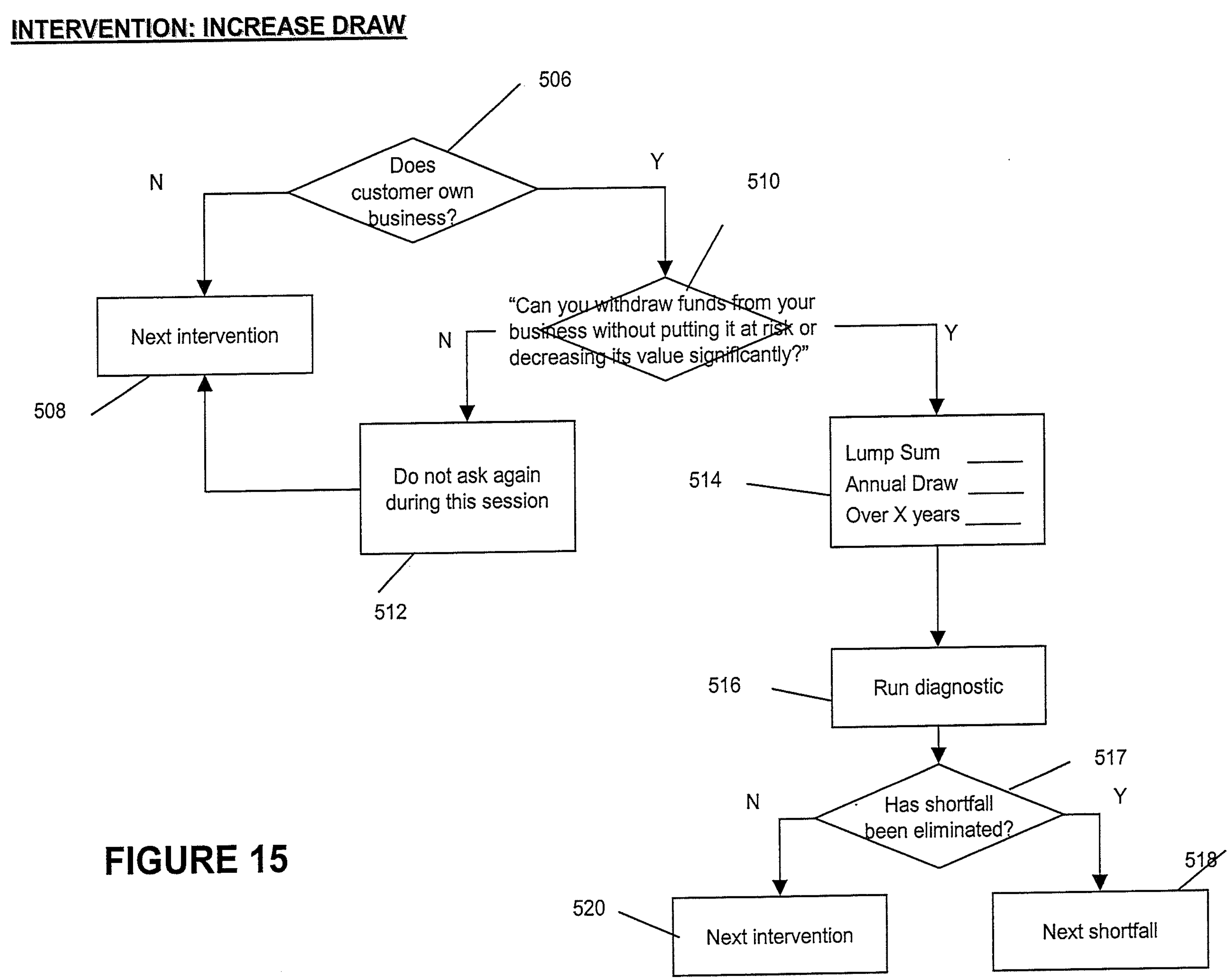

INTERVENTION: INCREASE DRAW
506
Does customer own business?
N
Y
510
Next intervention
508
"Can you withdraw funds from your business without putting it at risk or decreasing its value significantly?"
N
Y
Do not ask again during this session
512
514
Lump Sum ____
Annual Draw ____
Over X years ____
516
Run diagnostic
517
Has shortfall been eliminated?
N
Y
518
520
Next intervention
Next shortfall

FIGURE 15

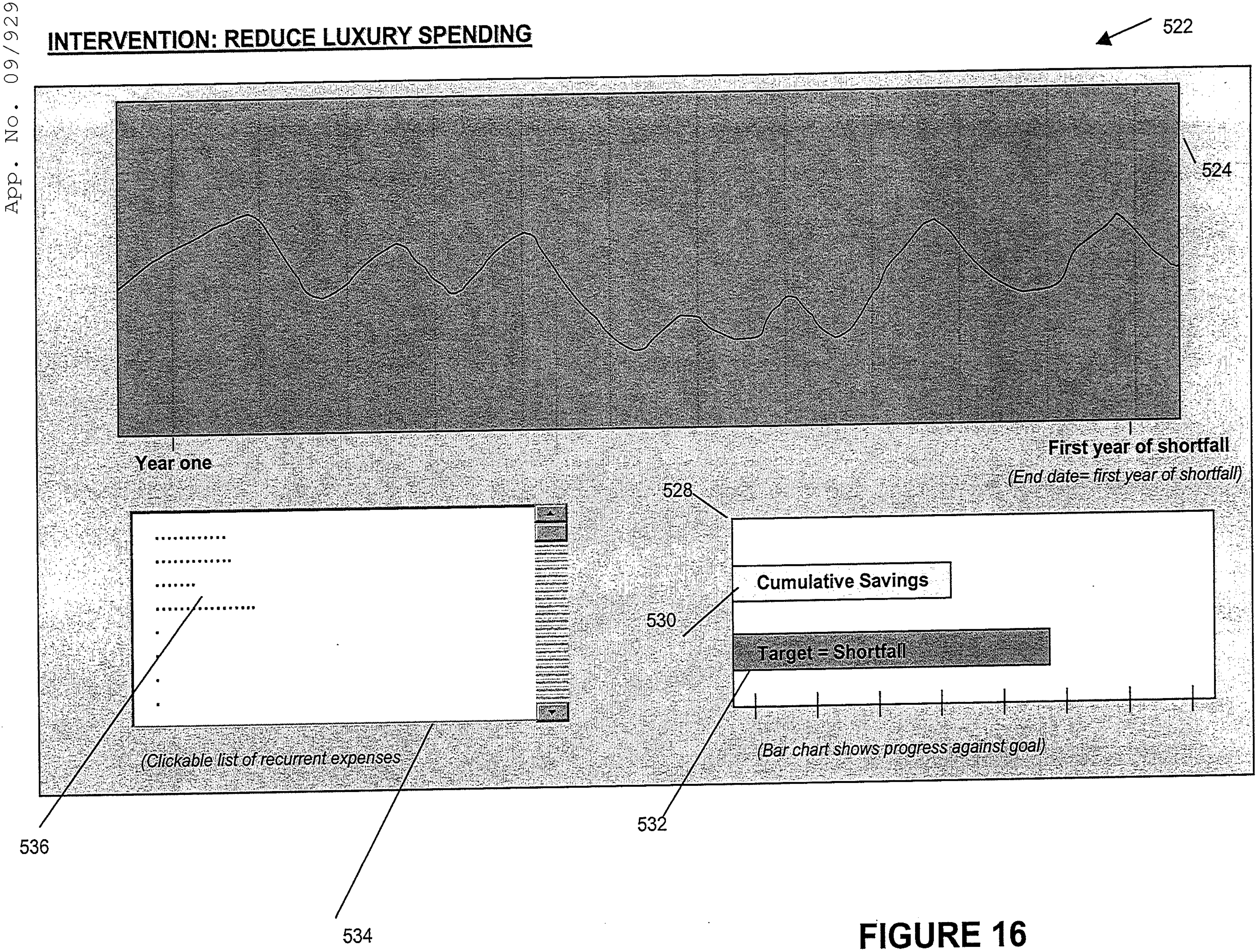
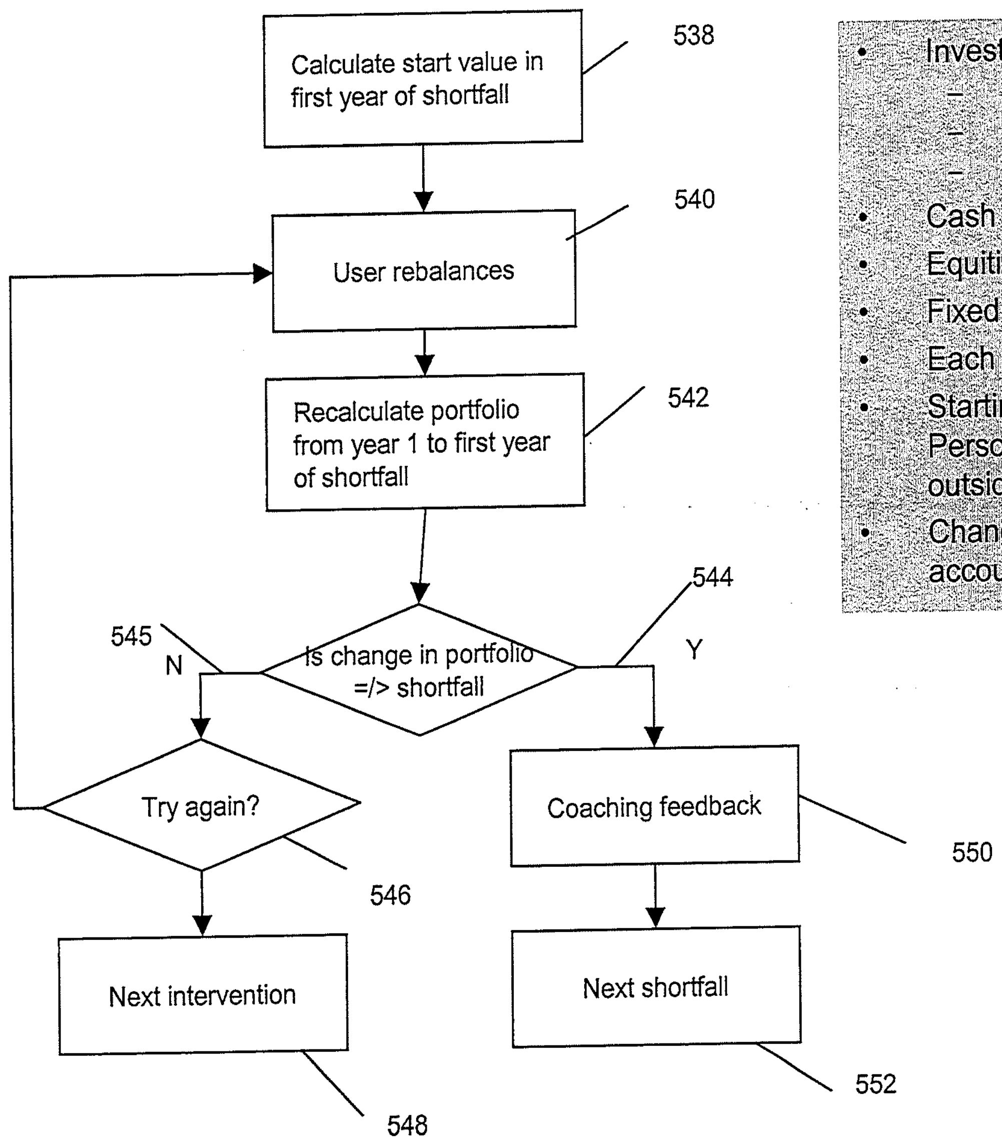

INTERVENTION: REDUCE LUXURY SPENDING
522
524
Year one
First year of shortfall
(End date= first year of shortfall)
528
Cumulative Savings
530
Target = Shortfall
(Bar chart shows progress against goal)
532
(Clickable list of recurrent expenses
536
534

FIGURE 16

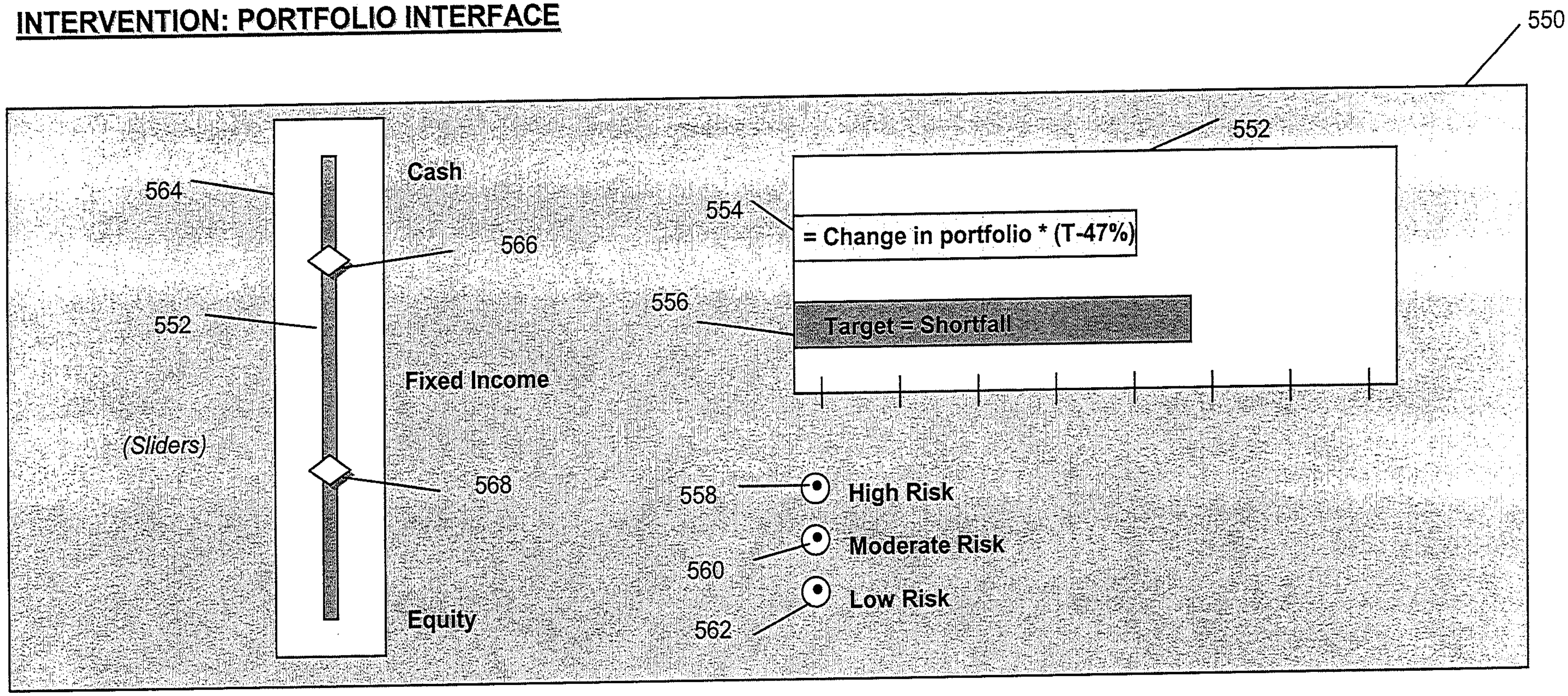
INTERVENTION: REBALANCE PORTFOLIO



- Investment portfolio has 3 components:
  - 1. Cash equivalents
  - 2. Equities
  - 3. Fixed income (bonds, etc.)
- Cash will be assumed to grow at 3%
- Equities will grow at 10%
- Fixed income will grow at 6%
- Each rate must be discounted by inflation= 2%
- Starting values in each asset class derived from Personal Net Worth data. (These assets must be outside IRA or 401K)
- Change of portfolio must be reduced by 10% to account for tax

FIGURE 17

INTERVENTION: PORTFOLIO INTERFACE



High risk "Light" flashes when equities > 35% of portfolio.
Moderate risk = 25%
Low risk = 15%

FIGURE 18

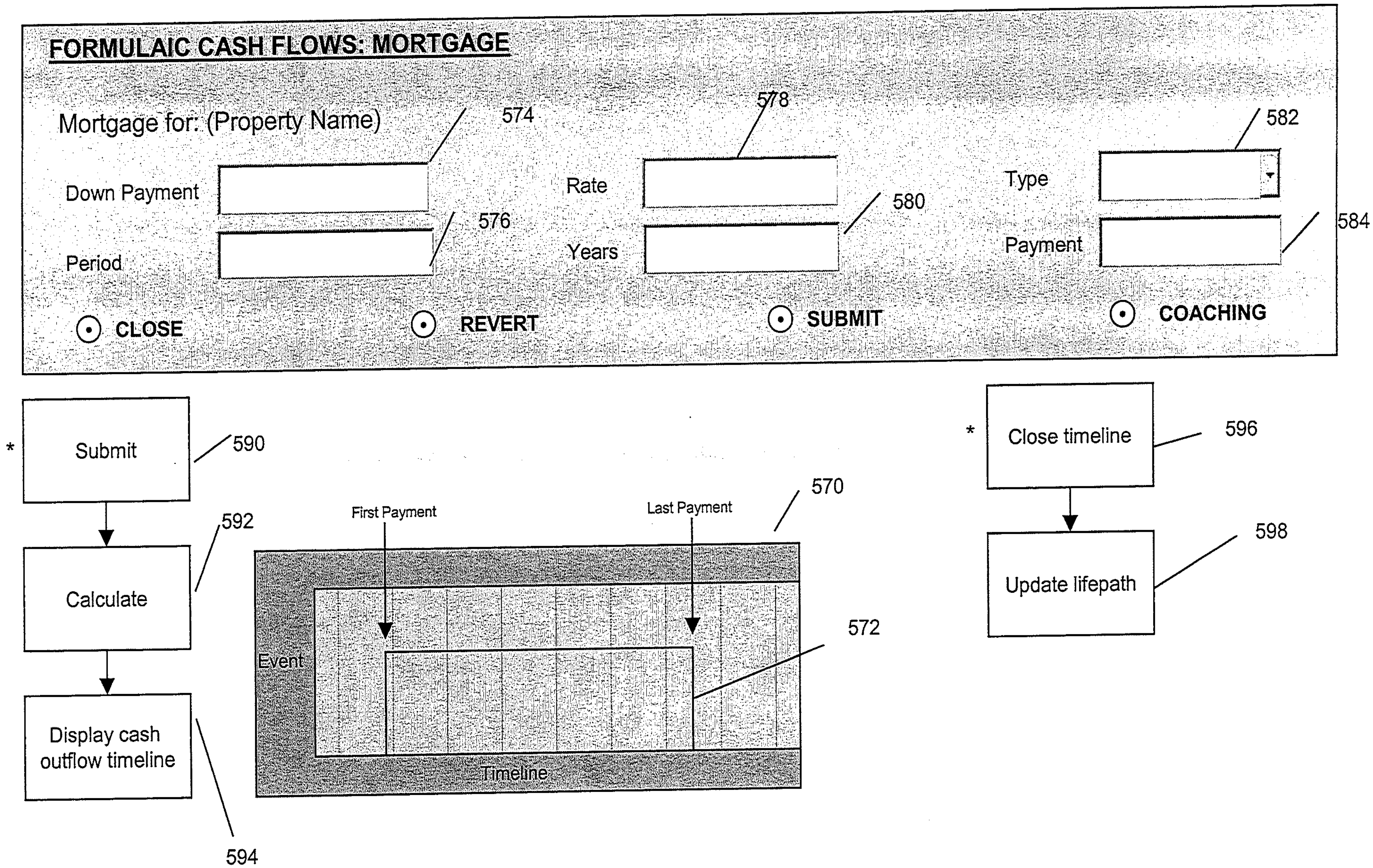

FORMULAIC CASH FLOWS: MORTGAGE
Mortgage for: (Property Name)
Down Payment
Period
Rate
Years
Type
Payment
CLOSE
REVERT
SUBMIT
COACHING
574
576
578
580
582
584
*
Submit
590
Calculate
592
Display cash outflow timeline
594
First Payment
Last Payment
Event
Timeline
570
572
*
Close timeline
596
Update lifepath
598

FIGURE 19

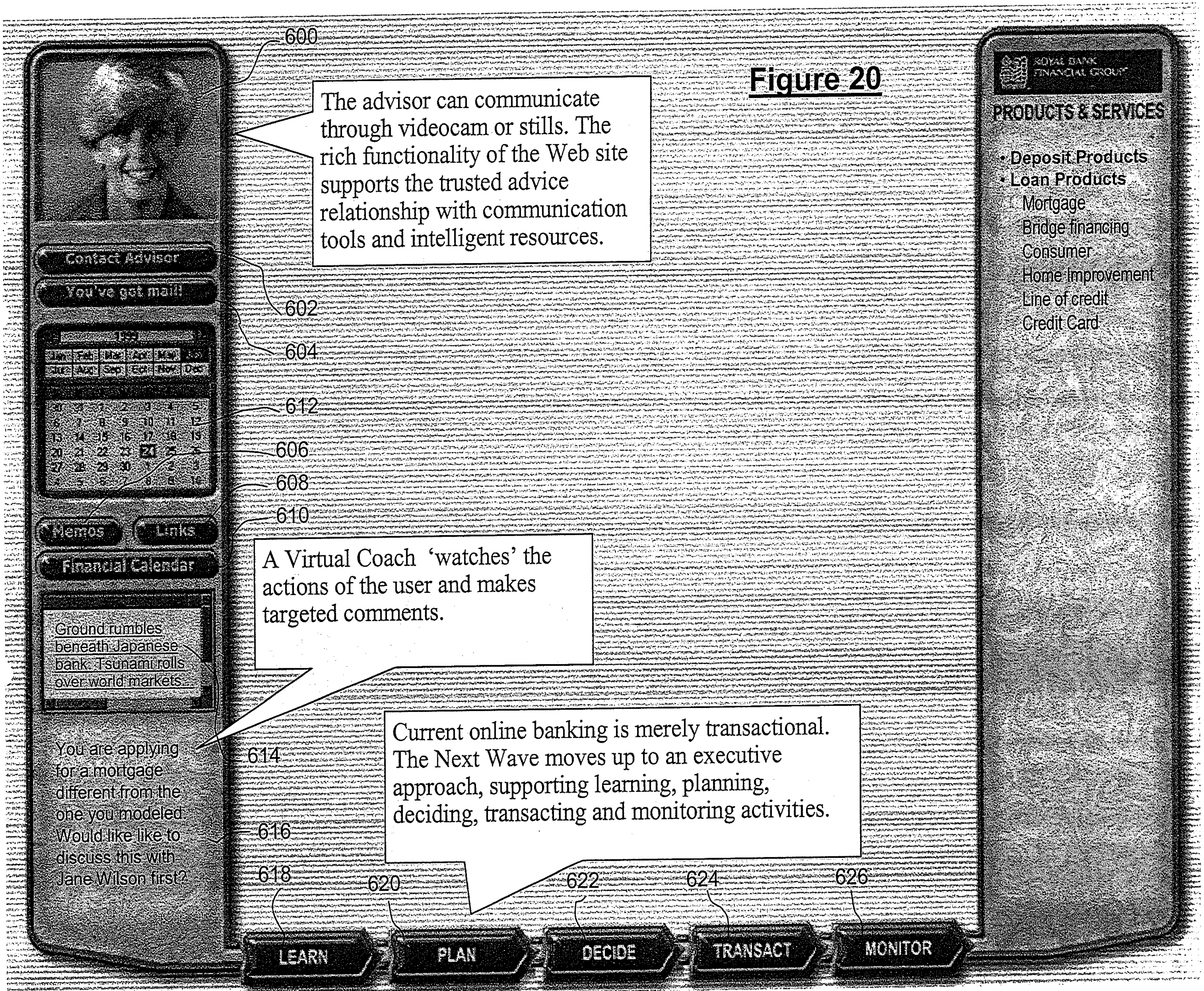

600
The advisor can communicate through videocam or stills. The rich functionality of the Web site supports the trusted advice relationship with communication tools and intelligent resources.
Contact Advisor
You've got mail!
602
604
612
606
608
610
Memos
Links
Financial Calendar
A Virtual Coach 'watches' the actions of the user and makes targeted comments.
Ground rumbles beneath Japanese bank. Tsunami rolls over world markets.
You are applying for a mortgage different from the one you modeled Would like like to discuss this with Jane Wilson first?
614
616
618
620
622
624
626
Current online banking is merely transactional. The Next Wave moves up to an executive approach, supporting learning, planning, deciding, transacting and monitoring activities.
LEARN
PLAN
DECIDE
TRANSACT
MONITOR
ROYAL BANK FINANCIAL GROUP
PRODUCTS & SERVICES
• Deposit Products
• Loan Products
Mortgage
Bridge financing
Consumer
Home Improvement
Line of credit
Credit Card

Figure 20

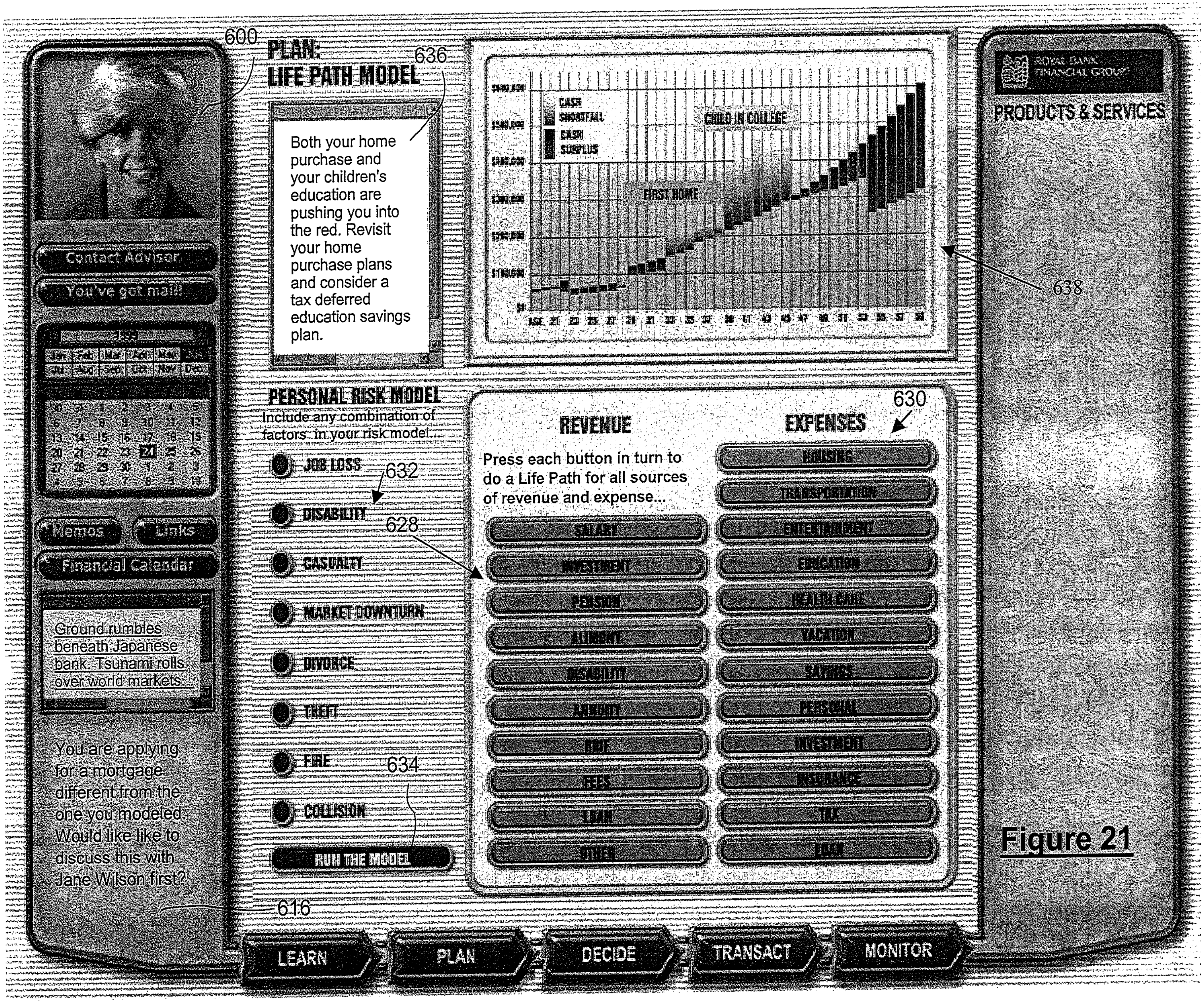

600
PLAN:
LIFE PATH MODEL
636
Both your home purchase and your children's education are pushing you into the red. Revisit your home purchase plans and consider a tax deferred education savings plan.
CASH SHORTFALL
CASH SURPLUS
CHILD IN COLLEGE
FIRST HOME
638
ROYAL BANK FINANCIAL GROUP
PRODUCTS & SERVICES
Contact Advisor
You've got mail!
1999
Jan Feb Mar Apr May
Jul Aug Sep Oct Nov Dec
Memos
Links
Financial Calendar
Ground rumbles beneath Japanese bank. Tsunami rolls over world markets.
You are applying for a mortgage different from the one you modeled Would like like to discuss this with Jane Wilson first?
616
PERSONAL RISK MODEL
Include any combination of factors in your risk model...
JOB LOSS
632
DISABILITY
628
CASUALTY
MARKET DOWNTURN
DIVORCE
THEFT
FIRE
634
COLLISION
RUN THE MODEL
REVENUE
Press each button in turn to do a Life Path for all sources of revenue and expense...
SALARY
INVESTMENT
PENSION
ALIMONY
DISABILITY
ANNUITY
FEES
LOAN
OTHER
EXPENSES
630
HOUSING
TRANSPORTATION
ENTERTAINMENT
EDUCATION
HEALTH CARE
VACATION
SAVINGS
PERSONAL
INVESTMENT
INSURANCE
TAX
LOAN
LEARN
PLAN
DECIDE
TRANSACT
MONITOR

Figure 21